The Holy Spirit Catholic Primary School

COMPUTING POLICY



2022 - 2023

**School Rules:** Ready - Respectful - Safe

**Inspirational Learning:** Love - Believe - Achieve - Thrive

**Curriculum Drivers:** Resilient - Aspirational - Independent - Spiritual - Enthusiastic

Signed by:

Headteacher: Mrs Connolly Subject Lead: Paul Foster Chair of Governors: Mrs Keig

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1. **Introduction**

The objective of this policy is to give direction to staff with regard to providing a sufficiently broad and challenging Computing curriculum, ensuring that teaching and learning in Computing develops children morally, physically, and socially. All children will regularly undertake Computing throughout their time at The Holy Spirit. The teaching of Computing is planned to ensure a progression of knowledge and skills across the foundation and primary phases.

**Aims (Intent)**

In Computing we teach the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. We will build on this knowledge and understanding so that pupils use information technology to create programs, systems and a range of content. We will focus on being safe whilst working in a digital environment and understand the digital footprint we leave. The curriculum will develop pupil’s digital literacy – so that they able to use, and express themselves at a level suitable for the future workplace and as active participants in a digital world.

Through our Computing curriculum we aim to build on pupils’ self-confidence and give each child a sense of achievement by:

* Enable each child to develop at his/her own level and pace.
* To foster enjoyment of all aspects of Computing and Technology.
* To provide children with opportunities to try a range of computing processes.
* To develop computing controls and skills.
* To develop a creative ability in computing and publishing.
* To produce documents to share with peers, staff and parents.
* To promote positive attitudes and enthusiasm for computing activities in school.
* To develop children’s social skills and awareness when they use a range of media and online resources.

**These aims are achieved by providing:**

* Well-resourced computing sessions where children fully engage and take part to listen, investigate, create and discover.
* The development of the everyday computing skills to achieve progression both in and out of school.
* Challenging, motivating and relevant computing activities.
* Opportunities to create and record digital pieces of work in connection to other lessons taught.
* **E-Safety and responsible use online:**

Holy Spirit is committed to online safety for all users and educating pupils about potential dangers and risks when using the internet. Through good examples of using technology for learning and enjoying opportunities to learn about the world, children will understand what it means to be safe and what processes they need to follow as they continue their school lives. We keep children safe online through a strong web filtering system, staff awareness and vigilance and an ongoing programme of assemblies and lessons to teach children online safety skills.

**Organisation (Implementation)**

Computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Knowledge and skills are mapped across each topic and year group to ensure systematic progression. All year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.  
Children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

KS1 will be taught how to; Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • use technology purposefully to create, organise, store, manipulate and retrieve digital content • Recognise common uses of information technology beyond school • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

KS2 will be taught how to; Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

**The Early Years Foundation Stage**

As the reception class is part of the Early Years Foundation Stage of the National Curriculum, we relate the computing aspects of the children’s work to the objectives set out in the Early Learning Goals (ELGs) which underpin the curriculum planning for children aged three to five.

**Wider Opportunities**

At The Holy Spirit we provide pupils with the chance to develop their skills and enhance their enjoyment outside of normal lessons. Children will be able to attend various computing clubs at lunchtime or after school where they can compare educational apps and also improve their knowledge of code. Coding allows the user to create fun games and visuals of their own as well as complete algorithm tasks with increasing difficulty. Trips to locations such as the local Catalyst Museum, also allows the pupils to explore digital technology, for example reading the weather report using green screen and creating instructions to complete puzzles.

**Resources**

Staff have access to Learn Computing which provides comprehensive and creative planning to deliver high quality computing lessons in computing science, information technology and digital literacy. Lessons focus on the pedagogy behind the technology as well as the use of the technology itself and allows the pupils to access a wide range of knowledge throughout Early Years, Key Stage 1 and Key Stage 2. Classes have an IWB screen each, complete IPad trolleys accessible at all times as well as laptops, easily transportable from the library. Upper KS2 also have their own laptop trolley which allows the children to complete various tasks daily.

**Inclusion**

The Holy Spirit staff adapt lessons to allow pupils, regardless of ability, the opportunity to access the tasks provided. Learning objectives are adjusted for the benefit of those with educational needs and extended to offer those gifted and talented children the opportunity to broaden their skills and knowledge. By offering children a curriculum which is tailored to their needs, and through work with outside agencies, we hope to see that all children, including those from disadvantaged backgrounds and with SEND have the chance to succeed and thrive. These experiences will help build on each child’s cultural capital ensuring that skills which have been learnt have been remembered, therefore allowing for new knowledge bases to be created and built upon each year.

**Assessment and Recording of Work**

Assessment is used to inform future planning and to provide information about our pupils throughout the key stages at The Holy Spirit our methods include:

* Teachers observations of pupils
* Teacher/pupil discussions
* Teacher questioning
* Use of vocabulary
* Referring to previous work
* Examples of work completed in lessons (Paperwork/Documents)
* Self-evaluation
* Photographs
* Termly assessment against key objectives for a unit of work

Teachers begin units of work with a recap of prior learning and assess the first and final Computing lessons to show progression across the unit. At the end of the topic, teachers assess key knowledge and skills based on whether children have demonstrated through their work that they have met the National Curriculum objectives and progression guidance for their phase. This helps the Computing Coordinator to monitor progress and attainment in computing across the school.

**Monitoring and Review**

Monitoring of the standards of children's work and of the quality of teaching in Computing is the responsibility of the Computing Coordinator. The work of the subject leader also involves supporting colleagues in the teaching of Computing, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The Computing Coordinator has specially-allocated, regular management time in order to review evidence of the children's work and undertake lesson observations of Computing teaching across the school. The Computing Coordinator monitors the quality of teaching and learning, progress and attainment in Computing through; staff voice, lesson observations, recordings of lessons and analysis of the data which is completed on the relevant assessment grid at the end of each topic.

The Computing Coordinator will write an annual action plan in which she/he will evaluate the strengths and weaknesses in the subject and indicates areas for further improvement.

**Continuing Professional Development**

Training will be arranged as and when deemed necessary by the Computing Coordinator in response to subject monitoring. In addition to training from external providers CPD may include; signposting to online resources to support subject knowledge, modelling lessons, 1:1 staff coaching.

**Review**

This policy will be reviewed annually in response to the review of our Curriculum